

**Ringwood Mines/Landfill Superfund Site
Update/Agenda for Bi-Weekly Call
Re Scheduled 5/30/2017 @ 2:00 PM Eastern**

Site-related Groundwater

Groundwater RIR	Draft Groundwater RIR submitted to USEPA on 1/22/13. USEPA issued comments on 11/26/13. Response to comments and revised document submitted to USEPA on 2/28/14. USEPA comment issued 9/26/14. Revised Site-Wide Groundwater RIR submitted to USEPA on 1/15/15. USEPA issued conditional approval on 6/24/15 pending submittal of addendum presenting most recent results. The RIR Addendum was provided to the USEPA on 7/29/15. Groundwater sampling was conducted during the week of 12/14/15 in the PMP area. Overburden wells in the PMP area to be installed during the week of 1/4/16. Following the 12/8/15 call NJDEP requested that we look into 8270 CSM and/or EPA METHOD 522 for analysis of 1,4-dioxane. For the December sampling method 8270 SM was used, and Accutest performed the analysis. The May/June sampling summary report was provided to the agencies electronically on 8/9/2016. The Annual Groundwater Report was submitted to the agencies electronically on 10/28/2016. Pursuant to USEPA request, RW3DD was resampled on 11/14/16 and was analyzed with quick laboratory turnaround for 1,4-dioxane. On 11/18/2016 the 1,4-dioxane results for the resampling of RW3DD were provided to EPA. The results were found to be consistent with historic results. A meeting with EPA was conducted on 4/18 to discuss content and submittal of the RIR addendum. A tentative delivery date of May 11/12 was mentioned during the 4/25 bi weekly call with feedback from EPA anticipated following the call. However, during the 5/9/17 biweekly call, the submittal of the document was proposed to follow a meeting with the NJ water commission. It is our understanding that the Borough is still attempting to schedule this meeting with the commission.
Site Related Groundwater Ecological Assessment (SRGEA) (Formerly known as the BERA)	Draft BERA for Site-related Groundwater submitted to USEPA on 3/6/15. USEPA issued comments on 5/29/15. Responses to comments and the revised document submitted to USEPA on 6/19/15. Submittal of the Site Related Groundwater Ecological Assessment will follow the collection of additional data from the PMP area. On 10/26/2016 EPA provided comments on the SRGEA with a request for a revised document within 21 days of receipt of the comments. On 11/16 USEPA provided an extension for the submittal of the revised SRGEA until 11/18/16. On 11/18/16 the revised SRGEA was submitted electronically to the agencies with responses to the comments received. On 12/13/16 Arcadis provided the redlined/strikeout version of the document as requested by USEPA to facilitate review. EPA provided comments on the SRGEA on 2/17/17 requiring a revised document be submitted with the requested change in 21 days from receipt of the letter. The revised SRGEA with response to comments was submitted to EPA on 3/10/17. Final EPA comments on the SRGEA were received on May 9, 2017. Submittal of the revised final document will be discussed during this call.
Groundwater HHRA	Responses to comments and revised document submitted to USEPA on 5/6/15. An addendum/update to the 2015 HHRA is being prepared to evaluate the effects of groundwater data collected since submittal of that document. This document will be submitted to the agencies in April. A call to discuss the initial findings of the HHRA with EPA was completed on April 13, 2017. Supplemental data on arsenic and cyanide was submitted to the EPA on May 3, 2017, and submittal of the updated HHRA is scheduled for May pending further input from EPA on the supplemental data discussion.
Groundwater FS	Draft FS to be submitted to USEPA 5/22/15. Site-related Groundwater Feasibility Study Outline and Decision Matrix submitted to USEPA on 12/12/14. USEPA provided comments on the outline on 1/9/15. USEPA acknowledged that an

	<p>extension to the submittal of the FS would be needed following issuance of agency comments on the CTM. Further development of the FS has been put on hold until additional data is collected to address USEPAs RIR addendum concerns. According to the February 3, 2017 schedule, the FS is due June 30, 2017. Further delays in the CTM could put the June 30th delivery date at risk.</p>
Candidate Technologies Memo	<p>Draft Candidate Technologies Memorandum submitted to USEPA on 1/29/15. USEPA issued comments on 4/2/15. Responses to USEPA comments submitted on 5/13/15. USEPA issued comments on 5/29/15. Revised document submitted to USEPA on 7/15/15. USEPA issued comments on the revised CTM on 7/31/15. During the 08/05/15 and 09/01/15 bi-weekly calls the USEPA acknowledged that a due date for the revised CTM will be discussed following USEPA issuing of comments on the RI addendum. USEPA acknowledged that an extension to the submittal of the CTM would be needed based on the agency comments on the RIR Addendum. Further development of the CTM has been put on hold until additional data is collected to address USEPAs RIR addendum concerns. During the 11/24/15 call the agency indicated that further review and understanding of the 1,4-dioxane results were needed before being able to commit to approve the CTM. A schedule for updating/completing the CTM was provided on February 3, 2017. Work is proceeding on the CTM in accordance with the February 3, 2017 schedule. On March 22, 2017, USEPA approved a schedule extension for delivery of the CTM until April 7, 2017. A meeting with EPA was conducted on 4/18 to discuss content and submittal of the CTM. A tentative delivery date of May 11/12 was mentioned during the 4/25 bi weekly call with feedback from EPA anticipated following the call. Note that the Borough would prefer not to submit the CTM and has indicated it will not review the final draft CTM until after a meeting with the North Jersey District Water Supply Commission can be held to obtain a better understanding of their position and what operational data they may have to better understand the potential surface water contribution from the site to the reservoir.</p>
Groundwater Monitoring	<p>The Annual Groundwater Report was submitted to the agency electronically on 11/25/15. The focused December 2015 PMP sampling summary was submitted to the Agency electronically on 02/20/16. Level 4 data validation of the sampling data for new wells OB-31 and OB-32 has been received. The summary data report for OB-31 and OB-32 was provided on 03/18/16. Groundwater, mine water, and surface water sampling per the approved January 25, 2016 Work Plan and the May 3, 2016 Cornerstone memo began on Thursday May 19th with surface water sampling and was completed on June 1st. Excel Environmental, on behalf of the Borough, collected replicate/split samples from select locations during this event. The summary report for this sampling event was submitted to the agencies electronically on August 9th. On August 1, 2016, a letter workplan that outlined the collection of samples for compound specific isotope analysis for 1,4-dioxane was provided to the agency to supplement data collection during the August sampling event. The results of this analysis have been received, are being evaluated, and will be provided with the annual sampling report.</p> <p>The annual 2016 sampling event was initiated on August 12, 2016 with the collection of a full round of water level measurements. Sampling activities began on Monday August 15th and were completed on August 30th. The results of the sampling have been validated and are currently being assembled into the annual summary report. The results of this event were consistent with prior events. The Annual Groundwater Report was submitted to the agencies electronically on 10/28/2016 as discussed during the 10/25/16 bi-weekly call. Four hard copies of the report were also provided. The 1,4-dioxane results of RW-3DD resampling were provided to the agencies on 11/18/16. A focused round of sampling is being scheduled for the 1st quarter 2017. Details of the focused sampling were provided in the workplan dated January 27, 2017. Well sampling outlined in the January 27th workplan was completed on February 8th with one</p>

exception. A sample from RW3 was not able to be collected due to a malfunction in the Zist equipment. Repairs to the Zist equipment will be made prior to future sampling events. Preliminary data from the February groundwater, mine water, and surface water sampling has been received. The summary report for the February 2017 collected data was provided to the agency on March 28th.

Reporting

Monthly Report The monthly report for the RI/FS work conducted in April was submitted to USEPA on 5/10/17.

Peters Mine Area

Revised RIR Approved on 11/27/12; however, USGS provided more comments to USEPA. Ford submitted supplemental information in response to USGS comments to USEPA on 6/28/13 and 9/11/13. USEPA approved on 9/12/13.

Revised FS Submitted to USEPA on 10/20/11. USEPA comments received 8/14/13. Responses to comments and revised document submitted to USEPA 9/5/13; revised document submitted on 9/18/13. USEPA approved on 9/20/13.

Cannon Mine Pit Area

Revised RIR USEPA approved on 6/28/13.

Draft HHRA Draft submitted to USEPA 6/1/12. USEPA issued comments 7/16/13. Ford provided response in email dated 7/30/13. Revised uncertainty section submitted to USEPA for consideration on 8/23/13. Ford received response from USEPA on 8/29/13. USEPA approved 9/12/13.

Draft BERA USEPA approved on 7/2/13.

Draft FS Draft submitted to USEPA 4/23/12. USEPA comments received 8/15/13. Responses to comments and revised document submitted to USEPA 9/6/13; revised document submitted 9/19/13. USEPA approved on 9/20/13.

O Connor Disposal Area

Revised RIR USEPA approved on 6/28/13.

Draft HHRA USEPA approved on 9/27/13.

Draft BERA USEPA approved on 8/2/13.

Draft FS USEPA approved on 9/27/13.

Soil Investigation As discussed during the 10/25/2016 Bi-Weekly call, a plan to investigate the soils at the former paint waste removal area in the OCDA was prepared and provided to the USEPA electronically on 11/21/2016. This soil sampling was initiated on 12/12/16 and completed on 12/15. The results of the sampling will be provided to the agencies during the week of 1/16/17 following receipt of validated laboratory analytical data.

At the request of the USEPA, two samples of paint waste were collected from the OCDA area (none was encountered in the OCDA drilling) and were sent to the laboratory for 1,4-dioxane analysis by method 8270 SIM with isotope dilution. The results of this analysis and the results of the soil sampling noted above were provided to the agencies on 1/20/17.

OU-2 Remedy

Administrative

ROD issued on 6/30/14. The monthly report for OU2 related work conducted in April was submitted to the USEPA on 5/10/17.

The Draft Final Remedial Design was submitted to the agencies electronically on September 8, 2016 per the approved project schedule. Comments on the RD were received on 11/22/16 and discussed during a brief conference call on 12/1/16. A formal Response to Comments was determined to not be necessary based on the discussions during the call. During the conference call, the schedule for submittal of the final design addressing the comments was discussed and mid-January was tentatively agreed to. A submittal date of January 16, 2017 for the submittal of the final RD was confirmed to the USEPA in an electronic mail message dated December 5, 2016, with a request for written confirmation from the USEPA of approval of the date. USEPA subsequently requested a delay in submittal of the final RD until after a letter regarding seismic concerns in the area was investigated. A review of prior seismic investigation reports was performed and a summary was provided to the agency on 1/11/17. On 12/05/16 USEPA issued a letter to the Respondents requiring the design of the removal of OCDA soils be initiated concurrent with the design of the contingency remedy for OCDA, schedule to be determined. This design will not be included in the current final RD submittal.

The submittal of the final RD for the Site (contingency remedy) has been delayed to account for minor design modifications required to address elevation and permitting concerns. The completed final design (contingency remedy) was submitted electronically to the agencies on February 10, 2017. At the meeting with EPA on 4/18, EPA stated that work on the parallel design effort for the OCDA full removal may be suspended, and it expects to issue a formal letter to this effect in the near future. EPA provided the final letter on April 25, 2017 suspending the required parallel design of the full removal for the OCDA.

Contingent Remedy

Borough of Ringwood provided their submittal on 12/19/14. USEPA approved the Contingent Remedy on 4/16/15.

Borough submitted the application for the Highlands Applicability Determination to NJDEP on 2/3/15 for the Contingency Remedy/proposed recycling center.

NJDEP issued the Highlands Applicability Determination to the Borough via letter dated 6/1/15 exempting the Contingency Remedy, including Proposed Recycling Center Project from the Highlands Act. The Borough provided a copy of the HAD to USEPA on 6/3/15 when they received it from NJDEP. Discussions continued with NJDEP DLUR regarding the HAD and the Preliminary Remedial Design Report. Based on most recent discussions, DLUR has requested a drawing of the OCDA and recycling center that shows both the original and proposed preliminary design limits of disturbance, cap, and recycling center, and NJDEP will modify the existing HAD #15 issued for the recycling center. No issues with the minor modifications shown in the Preliminary Remedial Design were identified.

RDWP

The revised RDWP was submitted on 6/4/15. Final comments on the RDWP were received from USEPA on 7/28/15. Responses and subsequent revisions to the RDWP will be provided as recommended. Final USEPA approval of the RDWP was received via electronic mail on 8/26/15. A full electronic copy of the RDWP was provided to the USEPA via e-mail on 8/27/15. Final approval of the PDSP field work start date was received from USEPA electronically on 9/23/15. A revised Remedial Design Work Plan schedule, based on EPA's approval of the PDSP field work schedule, was provided to USEPA on 9/24/15. Field work associated with the PDSP was initiated on 10/05/2015 and completed on 10/22/2015. Presentation of the results of the PDSP was conducted on 12/17/15 at USEPA offices in NYC. The Preliminary Remedial Design Report was submitted to USEPA on March 25, 2016.

	<p>The Permit Readiness Checklist, project summary, and attachments was submitted on May 12, 2016 to the NJDEP Office of Permit Coordination and Environmental Review. This submittal starts the pre-application process for permit equivalents for remedy implementation.</p> <p>A pre-application meeting with the Office of Permit Coordination was conducted on June 27, 2016. Permit associated correspondence has continued since that meeting. Meeting minutes for the June 27th meeting were circulated to attendees of the pre-application meeting on Monday September 12, 2016. Final Meeting Minutes, inclusive of comments provided by the full list of attendees, were circulated on October 6, 2016. Draft Final Permit Equivalent Applications were submitted to the various NJDEP divisions on October 6, 2016. The State Historic Preservation Office has recommended a Phase 1A cultural resources assessment. The Phase 1A Cultural Resource Assessment was submitted to the agencies on March 2, 2017. Comments on the Phase 1A were received on April 13, 2017. Comments were addressed and the document was resubmitted electronically on May 2, 2017. Approval of the Phase 1A Cultural Resource Assessment was presented in a letter dated May 16, 2017.</p> <p>Soil Erosion and Sediment Control (SESC) Plan was submitted along with the \$4,000 application fee to the HEP District this on 11/17/2016. Approval of the SESC was received electronically on 12/9/16 which allows for the next permit equivalent (stormwater) in the series to be applied for. Permit equivalent applications for the Contingency Design were submitted to the NJDEP for wetlands, flood hazard area, pond lowering, and discharge to groundwater permit by-rule, and the coordination process has continued. A conference call was held with NJDEP DLUR on May 4, 2017, to discuss comments on the permit equivalent applications and mitigation. NJDEP provided input on mitigation requirements related to the recycling center and indicated that the applications for the recycling center should be combined with those already submitted for the remediation</p>
CAG Meeting	<p>The last CAG meeting was conducted on 04/20/16 at the Ryerson Middle School. EPA held a public meeting on 12/06/16 at the Ryerson Middle School</p>
Other	<p>The www.ringwoodsiteupdate.com website has been shut down. On October 6, 2016 the website, which contained a link to the USEPA website, was closed as previously discussed with EPA.</p> <p>During prior bi-weekly calls borough representatives indicated that comments on the submitted design in advance of the next bi-weekly call. The revised recycling center design was provided on 5/4/17.</p>